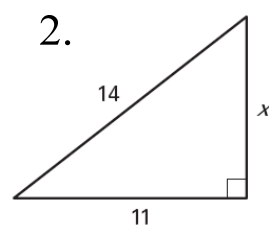
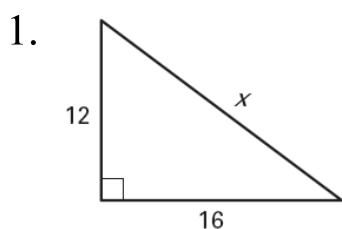


Find the unknown side length. Write your answer in simplest radical form.



Determine if the given side lengths form an acute, obtuse, or right triangle, or if they form no triangle.

3. 11, 13, 23

4. $2, 2\sqrt{5}, 5$

5. 16, 5, 22

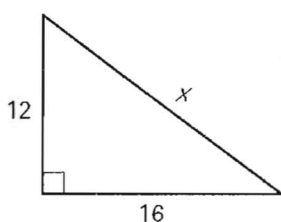
Find the unknown side length. Write your answer in simplest radical form.

1.

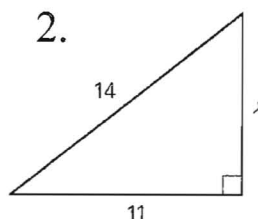
$$12^2 + 16^2 = x^2$$

$$\sqrt{400} = \sqrt{x^2}$$

$$x = 20$$



2.



$$11^2 + x^2 = 14^2$$

$$121 + x^2 = 196$$

$$\sqrt{x^2} = \sqrt{75}$$

$$x = 5\sqrt{3}$$

Determine if the given side lengths form an acute, obtuse, or right triangle, or if they form no triangle.

3. 11, 13, 23

$$23^2 _ 11^2 + 13^2$$

$$529 _ 121 + 169$$

$$529 \geq 290$$

OBTUSE

4. 2, $2\sqrt{5}$, 5

$$5^2 _ 2^2 + (2\sqrt{5})^2$$

$$25 _ 4 + 20$$

$$25 \geq 24$$

OBTUSE

5. 16, 5, 22

$$16 + 5 < 22$$

$$21 < 22$$

NO
TRIANGLE

$$2\sqrt{5} \cdot 2\sqrt{5}$$

$$4 \cdot 5$$

$$20$$